RAPHAT

Memo

120

Quality Control

Work Order November-08-12		69		*93	2369	k					,		Page 1
Revision ID:	0350-567-023 Replacement W			Accept	*N	900	740	100	*	Setup	Start Stop	*N *N	S1* S2*
Start Date: 1 Required Date: 1		Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*			ist Item II istomer:) :						
• •	Process Plan	:_/	Date:	Tooling: SPC (Y/N):		Da Da	te:	-]	Run	Start Stop	*N *N	R1* R2*
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hou		Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	Revis	sion Nbr											
N/A	Rev I	O			SAS .			teris la arco					
*100 *100* DC Document Control		DOCUMENT CONTRO Memo Photocopy	DL bluefile & type labels p	0.00 0.00 er PPPD350-567-023	15 / 12 1) 12 CHG002			C	A B EC	 {	M	C3	12-11-0
110				0.00									
110 Packaging Packaging		Packaging Memo Pick Packin ***ENSUR	ng Kit LE DT 8439 TEMPLAT	0.00 E IS INCLUDED***	DAS 15						/0	12/4	/8 (V)
*120		QC4- 100% Inspect kits	for completeness	0.00	- 15 12718								

0.00

NCR:	es/	/ No					WORK ORDER NON-C	O	NFORM	MANCE / UPD	ATE			,
										* *****		QA Closed:	Date:	•
Work Orde	er: _						DISPOSITION				_	EPARTMENT,		,
Part N	10.						Rework Scrap Use-as-is		ı	Skid-tube Machining noforming	Crosstube Small Fab Finishing	-	Water Jet d. Eng. Coor re/Packaging	Engineering Quality Other
NCR N	۱o. ₋						Work Order Update			Large Fab	Composite		Supplier	
Root					Desc	rip	otion of work order update	1	nitial	Actio	on	Sign &		
Cause		Date	Step	Qty		C	r Non-conformance	Ch	ief Eng	Descri	ption	Date	Verification	QC Inspector
oc/Data quip/Tooling perator faterial etup ther rocess upplier raining														
							F	AUL	T CATE	GORY				
Landi	ng G	iear			_		General				_			_
		Bending Centre No Cracks Crushed/C Cuffs Heat Treat	Crimped.		o/s		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink		1	ion Incomplete tions Incomplete/U enance	nclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned N	ct	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
	\dashv	Inspection		Tube			Cut Too Short		Misread		-	Power Loss/		Other
		Ripples in			Ì		Drill Holes		Offset		L		· _	•
		Torque W	aves in E	xtrusio	n [Drawing		Out of (Calibration				
		Turning Se	equence				Finish		Out of	Sequence				

Outside Dimensions

DQA:

Date:

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde				*923	369*				Page 2
Revision ID:	D350-567-02		9	Accept	*N90004	40100°		Start Stop	*NS1* *NS2*
Start Date: Required Date: Reference:	10/29/12 11/16/12	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ID: Customer:				
Approvals:	Process Pla	n:	Date:	Tooling: SPC (Y/N):	Date:			Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 130 *130*	D	Operation Description Packaging		Set Up/ Run Hours 0.00	Tool ID To		Accept Rejectly Qty		Reject Insp. Number Stamp
Packaging Packaging		Memo Identify and Location: PPP Rev:	pack for shipping as per	0.00 PPP D350-567-023	97629	_			
140		QC21- Final Inspection	- Work Order Release	0.00					. 2
140 QC Quality Control		Мето		0.00		-	M.	-5 M	12-11-12

NCR:	Yes	/	No

DQA: Date:

NCR:	es/	/ No				WORK ORDER NON-C	JON	1+OKI	MANCE / UPDA	IE			
											QA Closed:	Date:	•
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
Part f	-					Rework Scrap	$ \ $			Crosstube Small Fab	Proc	Water Jet I. Eng. Coor.	Engineering Quality
NCR I	•					Use-as-is Work Order Update		Therm	oforming	Finishing Composite		e/Packaging Supplier	Other
Root					Descri	ption of work order update	l l	nitial	Action	l	Sign &		
Cause	ı	Date	Step	Qty	4	or Non-conformance	Ch	ief Eng	Descripti	ion	Date	Verification	QC Inspector
oc/Data quip/Tooling perator faterial etup ther rocess upplier raining	7		•	e									
					l	F	AUL	T CATE	GORY		1		
Landi	ng G	ear				General	-						
		Bending Centre No Cracks Crushed/G Cuffs Heat Trea Inspection Ripples in Torque W	Crimped. t n Strip in Bend	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Instructi Mainte Mislabe Misread Offset	on Incomplete ions Incomplete/Uncl nance Ied	lear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/S	st ssing	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
		Turning So				Finish		Out of S	equence				
		Wave/Tw	-		-	Folio		1	Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

, Picklist Print November-08-12 10:41:45 AM 92369 Work Order ID: Parent Item: D350-567-023 Parent Item Name: Replacement Window, Large IPP Rev:A New Issue 07-06-07 JLM **Comments:** IPP Rev:B 08-10-07 as per revD DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measur		Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
212-12		Purchased	No	:		110	Each	217.0000	9	9			
Receptacles									C- 5,00				
				Location		Loc Oty	1	Loc Code					
いる>				380		169			-				
				12	22452	169			/22	452			
				ST365		48							
					20077	20							-2
				12	21827	28			6				
2600-6		Purchased	No			110	Each	639.0000	9	9	_		
Camlock Stud									STREET PURCH				
				Location		Loc Qty	1	Loc Code					
				396		17							
				12	22763	17							
SW				ST365		622							
					20077	4							
					21287	32			750	V 10 - 1			
					22441 22973	86 200			<u>/+-c</u>	1997			
					23150	300			F			^	
2600±1.W		Purchased	No	••	23120	110	Each	695.0000	3				, ,
Camloc Retaining Washer		Purchased	110						-			1	44/8 (1)
Carmoe Retaining Washer				Location		Loc Oty	(1	Loc Code			· ·		44/\$= (1) \$\\
				ST365		695	•						
6.0					21524	9							
Smo					22317	80							
				1.	22452	127				~ ~ ~			
					22973	179			195	1973			
				1:	23150	300							

Start Date: 10/29/12

Start Qty: 1.00

Required Date: 11/16/12

Required Qty: 1.00

											DQA:	Date:	-
NCR:	Yes	/ No				WORK ORDER NON-C		NFOR	AANCE / UPDA	NTE	_		ţ
						 					QA Closed:	Date:	
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT/	PROCESS	
Part NCR	No.					Rework Scrap Use-as-is Work Order Update		Thern	Machining noforming	Crosstube Small Fab Finishing Composite		Water Jet I. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
											I		
Root Cause		Date	Step	Qty	Des	otion of work order update or Non-conformance	•	nitial ief Eng	Action Descript		Sign & Date	Verification	QC Inspector
oc/Data				,									
quip/Tooling perator 1aterial													
etup													
ther							i						
rocess							١						8
upplier							1						
raining													
napproved													
						 F,	AUL	T CATE	GORY				,
Landi	ng (Gear				 General				· · · · · ·		<u></u>	_
		Bending				Bend	_	Grain			Ovalized		Pressure/Forced
	_	Centre No	t Concer	ntric to	o/s	BOM/Route		Hardwa			Over/Under		Temperature/Cure
		Cracks				Broken/Damaged		1	on Incomplete		Part Incorred	<u> </u>	Weld
		Crushed/0	Crimped.			 Burrs		4	ions Incomplete/Und	clear	Part Lost/Mi	ssing	Wrong Stock Pulled
	L	Cuffs				Contamination		Mainte	nance		Part Moved		
		Heat Trea				Countersink		Mislabe	led		Positioned W		_
		Inspection		Tube		Cut Too Short		Misread	I		Power Loss/:	Surge	Other
ē.		Ripples in				Drill Holes		Offset					
		Torque W	aves in E	xtrusio	n	 Drawing		Out of (Calibration				
		Turning So	equence			Finish		Out of	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

November-08-12 10:41:45 AM

Work Order ID:

92369

Parent Item:

D350-567-023

Parent Item Name:

Replacement Window, Large

Start Date: 10/29/12

Required Date: 11/16/12

Start Qty: 1.00

Required Qty: 1.00

AN526G832R9 Screw	Purchased	No		110	Each	622.0000	22
			Location	Loc Qty		Loc Code	
. ^			ST345	588			
Sind			122814	288			122814
			123522	300			
			ST346	25			
			120181	21			
			121556	4			
			ST347	9			
_			118983	9			
			118983	,	5 1	0.0000	
Washer SWD NAS1149DN832J	Purchased	No		110	Each	0.0000	50 M122441
D2463 Seal	Manufactured	No		110	f	664.9763	6.25 - 6.5789474
Seal							
			<u>Location</u>	Loc Oty		Loc Code	
75" sws			<u>Location</u> ST403	<u>Loc Otv</u> 664.97628		Loc Code	
			ST403	664.97628		Loc Code	
			ST403 72232			Loc Code	
			ST403 72232 79478	664.97628 15.38 0.43737		Loc Code	<u></u>
"B" SWS			ST403 72232	664.97628 15.38 0.43737 149.15891		Loc Code	<u>F3692</u>
75" SWS	Manufactured	No	ST403 72232 79478 83542	664.97628 15.38 0.43737	Each	Loc Code 0.0000	
D2942 SMS Replacement Window CMS			ST403 72232 79478 83542	15.38 0.43737 149.15891 500		0.0000	1864726
D2942 Replacement Window SV	Manufactured Manufactured	No No	ST403 72232 79478 83542	664.97628 15.38 0.43737 149.15891 500	Each Each		
D2942 Replacement Window SA D18439 template	Manufactured	No	ST403 72232 79478 83542	15.38 0.43737 149.15891 500 110	Each	0.0000 0.0000	186472 C
D2942 Replacement Window SV			ST403 72232 79478 83542	15.38 0.43737 149.15891 500		0.0000	1864726
D2942 Replacement Window SA D18439 template FG-778150-550-ROL	Manufactured	No	ST403 72232 79478 83542	15.38 0.43737 149.15891 500 110	Each	0.0000 0.0000	186472 C
D2942 Replacement Window SA D18439 template FG-778150-550-ROL	Manufactured	No	ST403 72232 79478 83542 90297	15.38 0.43737 149.15891 500 110	Each	0.0000 0.0000 1,747.5000	186472 C

												DQA:	Date):
NCR:	Yes	/ No					WORK ORDER NON-C	O	NFOR	MANCE / UPDATE				•
												QA Closed:	Date	2:
Nork Ord	er:						DISPOSITION	ł		AGA	AINST DE	PARTMENT/	PROCESS	
Part NCR	No.						Rework Scrap Use-as-is Work Order Update		Thern	Machining Sma noforming Fini	stube ll Fab lishing cosite		Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root					Des		otion of work order update		nitial	Action		Sign &		
Cause	г	Date	Step	Qty		C	r Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
oc/Data quip/Tooling perator faterial etup ther rocess upplier raining napproved														
				- 6			F/	AUL	T CATE	GORY		-		
Land	ng (Gear					General		1			,	-	_
		Bending Centre No Cracks	ot Concer	ntric to	o/s		Bend BOM/Route Broken/Damaged		Grain Hardwa Inspect	re on Incomplete		Ovalized Over/Under Part Incorred	<u>-</u>	Pressure/Forced Temperature/Cure Weld
		Crushed/0	Crimped.		Ì		Burrs			ions Incomplete/Unclear		Part Lost/Mi	<u> </u>	Wrong Stock Pulled
		Cuffs	•				Contamination		Mainte	•		Part Moved	, L	
		Heat Trea	t				Countersink		Mislabe	led		Positioned V	Vrong	
		Inspection	n Strip in	Tube			Cut Too Short		Misread	I		Power Loss/	Surge	Other
		Ripples in	Bend				Drill Holes		Offset		-	-	_	
		Torque W	aves in E	xtrusio	n .		Drawing		Out of (Calibration				
		Turning So	equence				Finish		Out of	Sequence				

Outside Dimensions

Wave/Twist in Tube

Folio

⁻ H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

5m>

NCR:	Yes /	No No	WORK ORDER NON-CONFORMANCE / UPDATE

										DQA:	Date:	
NCR: Y	Yes	/ No				WORK ORDER NON-C	ONFO	RMANCE / UPDA		•		•
										QA Closed:	Date:	•
Work Orde	3r.					DISPOSITION			AGAINST DEF	PARTMENT	/PROCESS	
vvoik Orde	cı. -					Rework	1	Skid-tube	Crosstube		Water Jet	Engineering
Part N	۷o.					Scrap		Machining	Small Fab	Prod	d. Eng. Coor.	Quality
	-					Use-as-is	The	rmoforming	Finishing	Rec/Stor	re/Packaging	Other
NCR N	No.					Work Order Update		Large Fab	Composite		Supplier	
Root						ption of work order update	Initial	Actio		Sign &		
Cause	\Box	Date	Step	Qty		or Non-conformance	Chief Er	ng Descrip	ition	Date	Verification	QC Inspector
Doc/Data	Ц									,		
quip/Tooling	$\vdash \vdash$											
Operator	$\vdash \vdash$											
Material	H		}			İ				ļ		
Setup Other	Н								(*)			
Process	H											
Supplier	H	1					ļ	•		l		
Fraining		1						Ì	j			
Jnapproved											L	
						F/	AULT CAT	rEGORY				
Landi	$\overline{}$	1				General			-	1		,
	\vdash	Bending				Bend	Grain			Ovalized	<u> </u>	Pressure/Forced
	Н	Centre No	ot Concer	ntric to (O/S	BOM/Route	Hard			Over/Under		Temperature/Cure
	-	Cracks	D		_	Broken/Damaged	\vdash	ction incomplete		Part Incorred	 	Weld
	\vdash	Crushed/(crimped.			Burrs		uctions Incomplete/Un ntenance	nciear	Part Lost/Mi		Wrong Stock Pulled
	\vdash	Cuffs Heat Trea	t		-	Contamination Countersink	\vdash	itenance ibeled	<u> </u>	Part Moved Positioned V		
	$\boldsymbol{\vdash}$	Inspection		Tube	<u> </u>	Cut Too Short	Misre			Positioned v		Other
	\vdash	Ripples in		IUNE	\vdash	Drill Holes	Offse		L	1, 0,4,0, 1033)		Journe
		Torque W		xtrusion	, ⊢	Drawing		of Calibration				
	-	Turning Se				Finish	\vdash	of Sequence				
	-	Wave/Tw				Folio		de Dimensions				

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD.

D350-567 Page 28 of 28

PARTS LIST 5.0

Qty	Qty	Qty	Qty	Qty	Qty		
-015	-017	-025	-027	-111	-117	Part Number	Description
X						D350-567-015	FLOOR WINDOW INSTALLATION (SMALL)
	Х					D350-567-017	FLOOR WINDOW INSTALLATION (SMALL)
		Х				D350-567-025	FLOOR WINDOW INSTALLATION (LARGE)
			Х			D350-567-027	FLOOR WINDOW INSTALLATION (LARGE)
				Х		D350-567-111	FLOOR WINDOW INSTALLATION (EXTRA LARGE)
					X	D350-567-117	FLOOR WINDOW INSTALLATION (EXTRA LARGE)
						D050 507 040	DEDI ACEMENT MANDON VIT (OMALL)
	1					D350-567-013	REPLACEMENT WINDOW KIT (SMALL)
L _		1	1			D350-567-023	REPLACEMENT WINDOW KIT (LARGE)
				1	1	D350-567-113	REPLACEMENT WINDOW KIT (EXTRA LARGE)
	1		1	1		D350-567-115	INTERIOR FLOOR WINDOW KIT
1		1			1	D350-567-031	INTERIOR FLOOR WINDOW KIT
L							(SLIDING DOOR COMPATABLE)

	-023 \	Qty		Qty	1	l .
		-113	Qty -115	-031	Part Number	Description
					D350-567-013	REPLACEMENT WINDOW KIT (SMALL)
	Х				D350-567-023	REPLACEMENT WINDOW KIT (LARGE)
		X			D350-567-113	REPLACEMENT WINDOW KIT (EXTRA LARGE)
			Х		D350-567-115	INTERIOR FLOOR WINDOW KIT
				Х	D350-567-031	INTERIOR FLOOR WINDOW KIT
						(SLIDING DOOR COMPATABLE)
1					D2125	REPLACEMENT WINDOW, SMALL
	E				-D2942	-REPLACEMENT WINDOW, SMALL
		1			D3290-041	REPLACEMENT WINDOW ASSEMBLY, EXTRA LARGE
					D3290-041	REPLACEMENT WINDOW ASSEMBLT, EXTRA LARGE
1					D2126-0600	SEAL
	1-4				ID2463-0750	INEOPRENE-SEAL
		1			D2463-0860	NEOPRENE SEAL
	⊘ ≥	12			=2600=6================================	*/ATURN FASTENER
	19	12			=2600=LW====	WASHER
		12			-212 <u>-12</u>	-RECEPTACLE -
(=22-	21			AN526C832R9-	SGREW (OR AN526C832-9, OR MS51957-126)
4	<u>-44</u>	42			:AN960JD8	LWASHER -
`	-22	21			MS21042L08	-NUT-(OR MS21042-08)
	18	24	>		MS20426AD3-5	-RIVET
	2-SQ.~	-2.SQ.			N/A	-9.7oz.7781-S-GLASS-UNIVERSAL WEAVE
YD	YD	YD				
				1	D2463-0450	NEOPRENE SEAL
				1	D3210-1	DOUBLER
				1	D3211-1	BRACKET
				1	D3211-1	FLOOR WINDOW
				1	D3213-041	DOOR ASSEMBLY
			1		D3293-1	DOUBLER
			1		D3294-1	BRACKET
			1		D3295-041	FLOOR WINDOW
			1		D3296-041	DOOR ASSEMBLY
			1		D2463-0530	NEOPRENE SEAL
			9	8	AN526C632R12	SCREW (OR AN526C632-12, OR MS51957-32)
	+		9	8	AN960JD6	WASHER
			9	8	MS21042L06	NUT (OR MS21042-06)
			2	40	MS20470AD4-5	RIVET
			115	90	MS20470AD4-5	RIVET
			15	20	MS20470AD4-7	RIVET

• COPYRIGHT © 2000 BY DART AEROSPACE LTD •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: D

Date: 08.07.08